

ABSTRACT

The present invention provides a multiple layered non-PVC containing tubing structure. The tubing structure has a first and a second layer. The first layer is of a polymer blend of (a) from about 30% to about 50% by weight of the first layer a first polyolefin selected from the group consisting of a first propylene containing polymer, (b) from about 0 to about 50% by weight of the first layer a second polyolefin of an α -olefin containing polymer; (c) from about 0% to about 40% by weight of the first layer a radio frequency susceptible polymer selected from the group consisting of polyamides, ethylene acrylic acid copolymers, ethylene methacrylic acid copolymers, polyimides, polyurethanes, polyesters, polyureas, ethylene vinyl acetate copolymers with a vinyl acetate comonomer content from 18-50% by weight of the copolymer, ethylene methyl acrylate copolymers with methyl acrylate comonomer content from 180%-40% by weight of the copolymer, ethylene vinyl alcohol with vinyl alcohol comonomer content from 15%-70% by mole percent of the copolymer; (d) from about 5% to about 40% of a first thermoplastic elastomer. The second layer is of a non-PVC containing material and is a multiple component polymer blend of from about 25% to about 55% by weight of a second thermoplastic elastomer, 20% to about 40% of a polyester polyether block copolymer, 0-15% ethylene copolymerized with vinyl lower alkyl esters, 0-10% of a second propylene containing polymer and from 0%-35% acrylonitrile butadiene styrene block copolymer.